



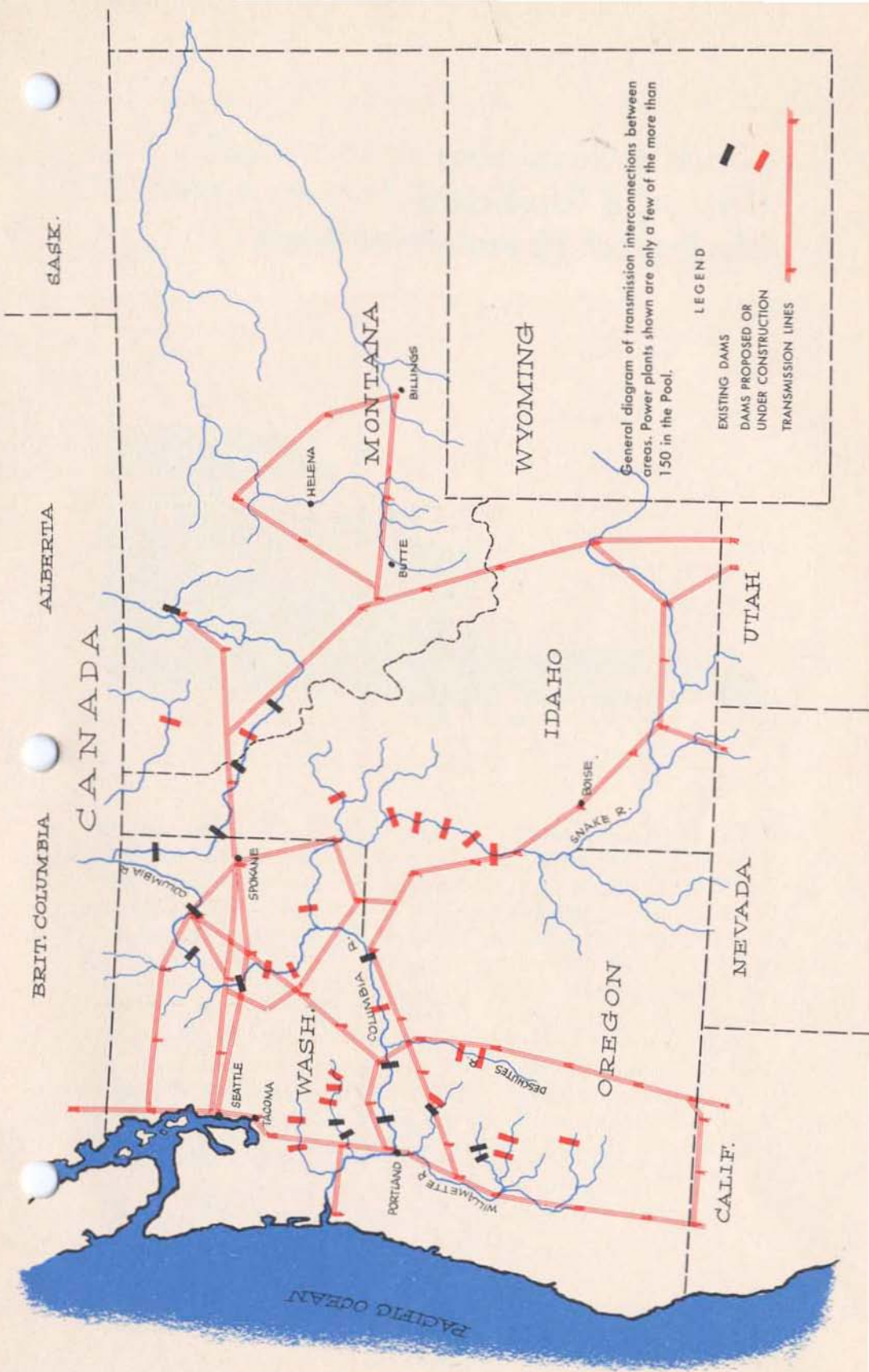
**"Our Future Power Supply:
ACTION NEEDED"**

Highlights of discussion by Paul B. McKee,
President, Pacific Power & Light Company,
at Members' Forum, Portland Chamber of Commerce,
October 17, 1955

THE MAP

This is the growing Pacific Northwest, a long-time leader in the use of electric power. Over a period of nearly 40 years, it has developed the world-famous Northwest Power Pool. This vast network of transmission lines distributes throughout this great region the output of all its major power plants to 1,700,000 customers, of which more than one million are served by private utility companies and 660,000 by public agencies. The rapid growth of the area can be measured in terms of its demand for electric power — from 1,200,000 kilowatts in 1930 to 7,750,000 kilowatts today! By 1965 this area must have at least 14,440,000 kilowatts to meet its needs, and by 1970 the region will need 20,000,000 kilowatts.

This is a big job—but no bigger than is being done as part of the day's work in other regions. The needs of the Pacific Northwest CAN be met. Proposed power projects already on the drawing boards of the power agencies of the area can provide more than enough electricity to supply requirements through 1965 and beyond—IF we all get to work. The job is to get these plants under way. We need action—NOW!



General diagram of transmission interconnections between areas. Power plants shown are only a few of the more than 150 in the Pool.

LEGEND

- EXISTING DAMS
- DAMS PROPOSED OR UNDER CONSTRUCTION
- TRANSMISSION LINES

SASK.

ALBERTA

CANADA

BRIT. COLUMBIA

MONTANA

WYOMING

IDAHO

UTAH

NEVADA

OREGON

CALIF.

PACIFIC OCEAN

SEATTLE
TACOMA
WASH.

PORTLAND
WILMETTE R.
DESQUINES R.

SPOKANE

BOISE
SNAKE R.

COQUILLE R.

BUTTE

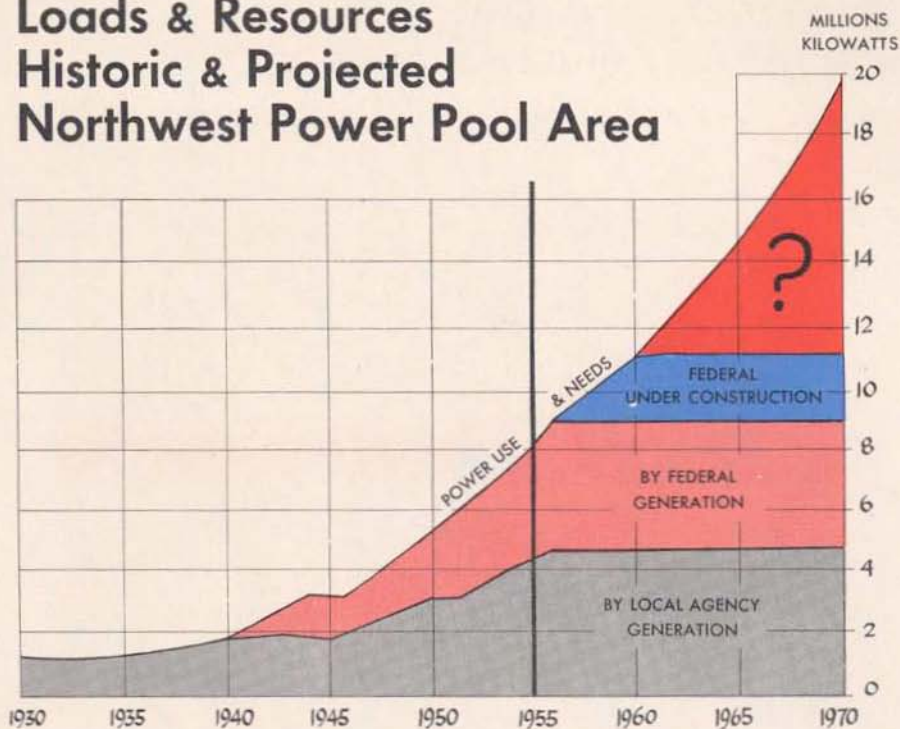
HELENA

BILLINGS

COLUMBIA R.

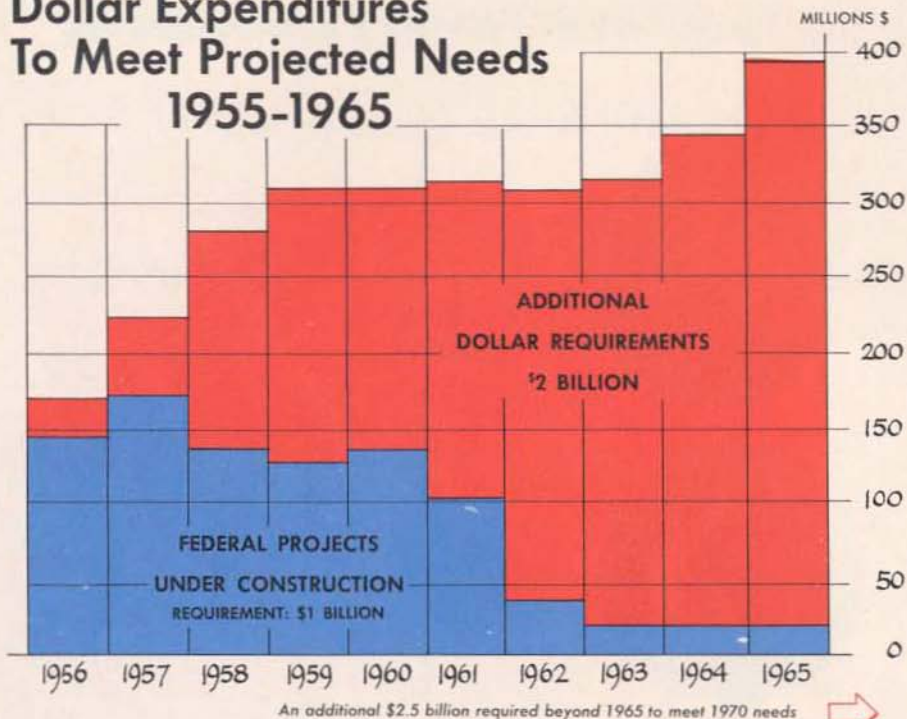
COYUTE R.

Loads & Resources Historic & Projected Northwest Power Pool Area



This is the picture of Northwest power use, past and future. Beyond 1955 the estimated demand for power is based on studies by the engineering section of the Pacific Northwest Governors' Power Policy Committee, in which all power agencies of the region have cooperated. Against this picture of steadily-rising demand are shown the region's power resources. As of 1955 these resources, almost equally divided between local and federal, are big enough to carry the load. Federal projects now under construction, if kept on schedule, will meet the demand until approximately 1960. It takes from four to ten years to build large hydroelectric plants. That means these federal projects must be completed on schedule and new projects must be started NOW to fill the tremendous gap of 9,000,000 kilowatts between power needs and power resources in the years from 1960 to 1970. And unless the gap is filled, the region's growth will be seriously retarded.

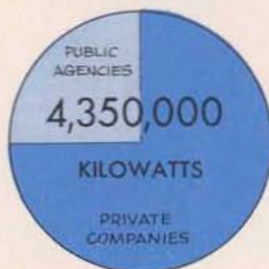
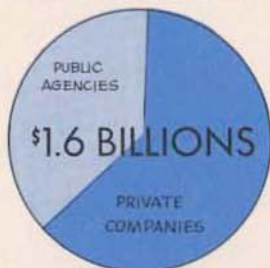
Dollar Expenditures To Meet Projected Needs 1955-1965



Now let's look at the dollars needed for power development just between 1955 and 1965. The one billion dollars needed to complete Federal projects now under construction — principally McNary, Chief Joseph and The Dalles dams—still remain to be appropriated by Congress. To complete the job through 1965 will require the additional amount shown in the red area of the chart, or two billion dollars. In other words, through the next ten years, the region must have an average of \$300,000,000 a year — or *three billion dollars!* This is twice the amount Congress has appropriated for Federal power facilities in the Pacific Northwest in the past ten years — a period when this area was receiving some 40 per cent of the total of such Congressional appropriations. This period also marked the high point of Congressional spending for such purposes. To carry the power supply job on from 1965 to 1970 will require an additional *two and one-half billion dollars!* It is evident that it will be necessary to team up every Federal dollar we can get with the funds that local agencies are willing and able to invest if we are to accomplish this vital power development.

Northwest Power Pool Facilities

LOCAL AGENCIES



TOTAL INVESTMENT
IN GENERATION,
TRANSMISSION
& DISTRIBUTION

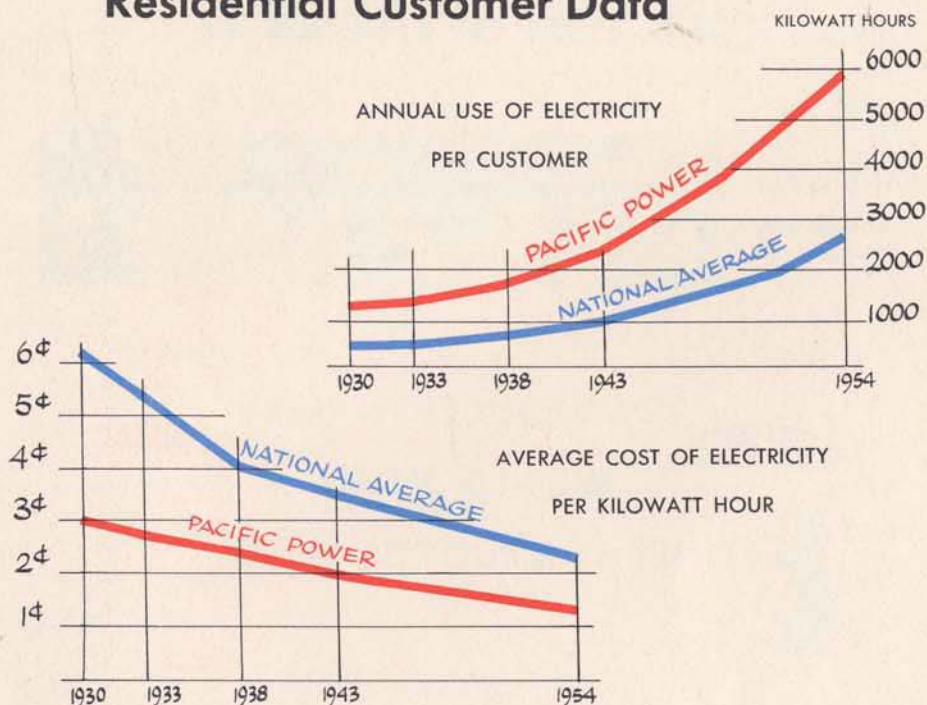
GENERATING
CAPACITY

FEDERAL GOV'T



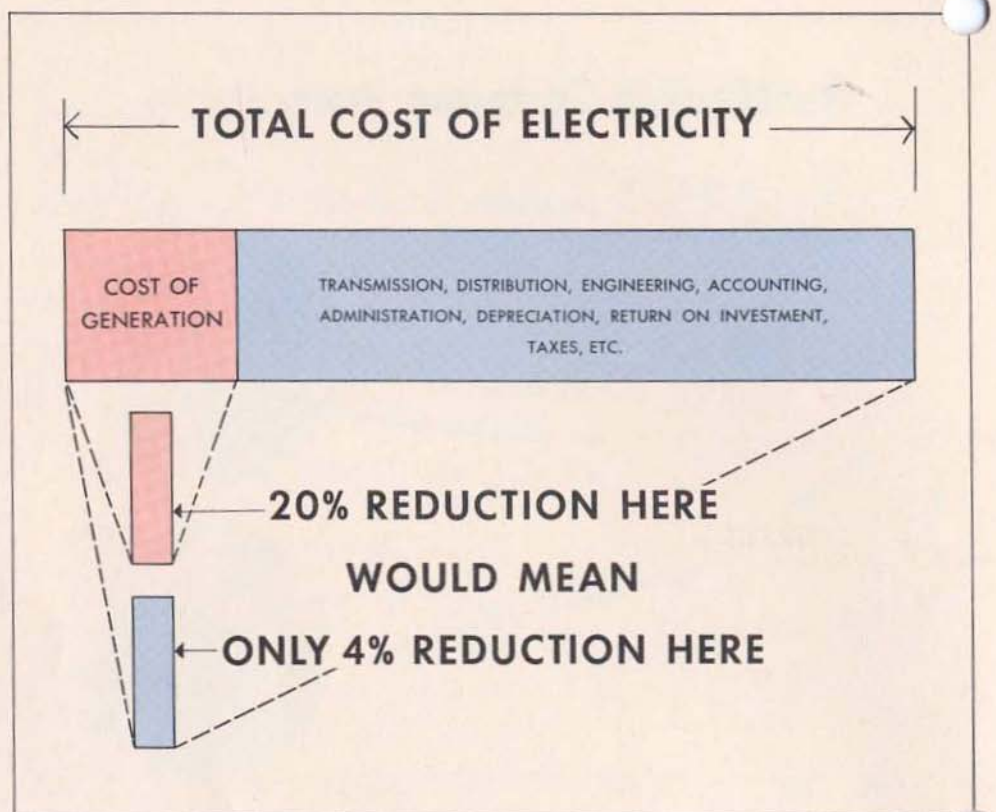
This is a picture of the large investment that has been made to provide the region with the power facilities it uses today. Traditionally in this country, power supply has been a local responsibility, with each area providing its own generating capacity. But in the Pacific Northwest, the Federal government stepped into the picture with a series of spectacular multi-purpose river development projects. Even so, local agencies, private and public, continue to carry more than half the load and are able and willing to develop the additional power this region must have, over and above whatever can be financed by a hard-pressed Federal treasury.

Residential Customer Data



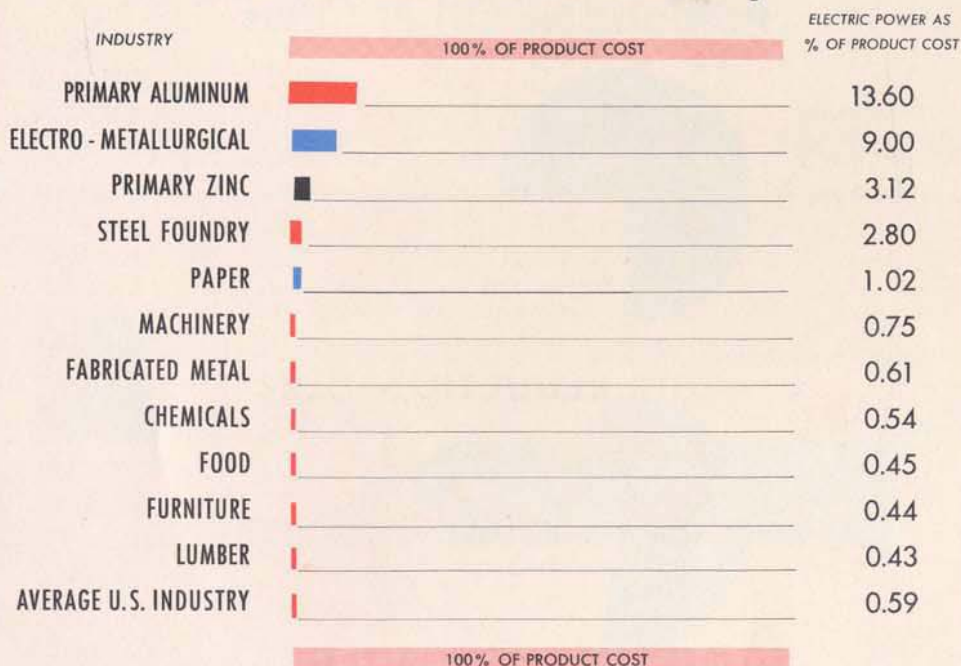
For many years the Pacific Northwest has led the nation in the large use and low cost of electric service. These charts show that before the first Federal power development was even started in the region, homes here used more than twice the national average amount of electricity, and got this energy for only about *half* the national average cost. This favorable relationship has continued throughout the past 25 years. The aggressive and forward-looking policies of the region's local utilities made this record possible, and the same philosophy of abundant, low-cost power is behind their plans today for new hydroelectric developments in the area.

(While figures used in these charts are for Pacific Power & Light Company, the use and cost figures of other systems in the region follow the same general pattern.)



Every utility system naturally wants to obtain its power supply at the lowest possible cost. It should be understood, however, that the cost of generation is only a small part of the total cost of providing electricity to the user at the point where it is needed, and at the voltage which can be used. For example, a 20% reduction in the cost of generation would mean only about a 4% reduction in the total cost of serving the customer. It is important to keep this relationship in mind when studying the region's power supply problem. If generating costs are over-emphasized to the point of blocking anything except tax-free, government-subsidized power generation, the region will soon run out of power, and the resultant losses will far exceed the narrow margin of illusory benefits from an all-Federal program.

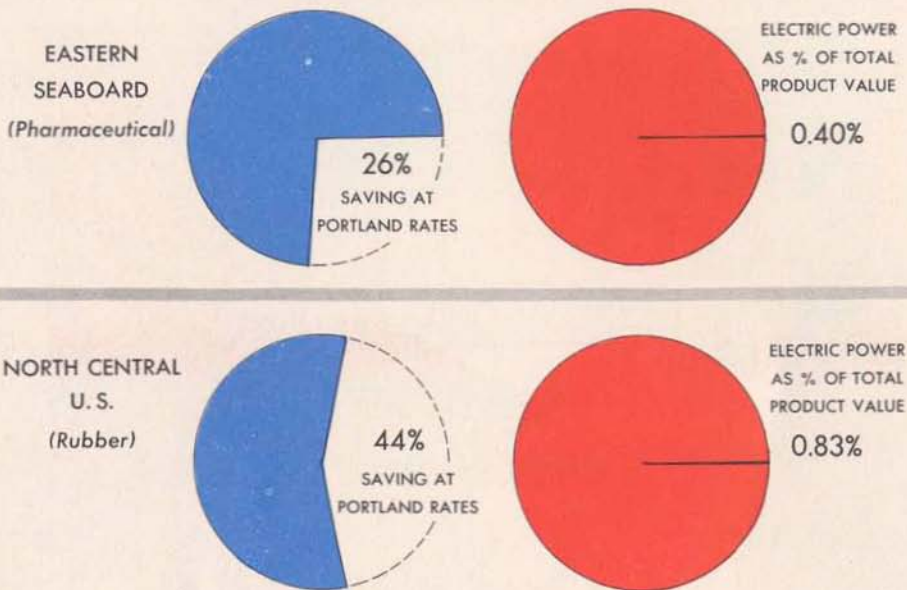
Power Costs and Industry



Source: U. S. Census of Manufactures

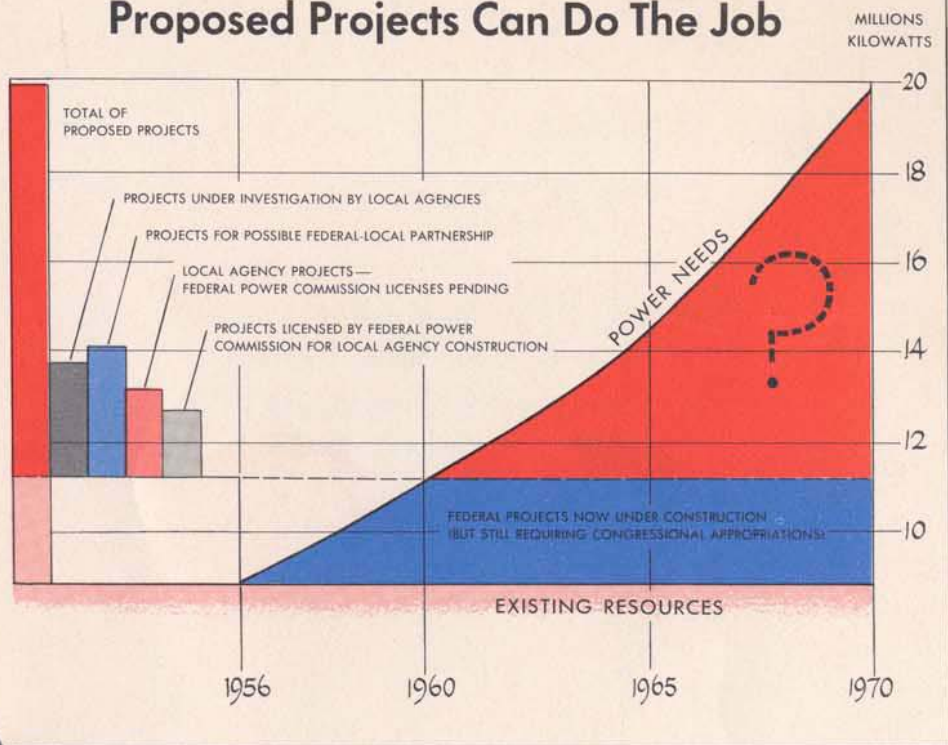
The Pacific Northwest wants new industries which will provide expanding opportunities for its citizens and broaden its economy. Those of us who are actively seeking new industries have learned from actual experience that when an industrialist looks at a new area he asks about raw materials, markets, labor supply, transportation, political climate, community facilities and taxes. On the subject of power, the typical industrialist is most interested in the adequacy and dependability of power supply. So long as power rates are fair and reasonable for the service rendered, they normally play a very small part in the final decision. This chart shows why. For U. S. industry as a whole, the cost of electric power amounts to only a little more than one-half of one per cent of the total cost of the finished product. It is clear, therefore, that so long as we can offer adequate power, we shall continue to see expansion of industry and payrolls in the Pacific Northwest. But if we permit obstructionists to block the development of new hydroelectric projects, we will surely run out of power — and industrial growth will come to an abrupt halt!

Comparison of Power Costs Portland vs Other Cities



Let's take a look at some typical industries and see what inducement to move to this region we could offer them, based on our low power costs. For example, the power bill saving that could be offered a large pharmaceutical house in an eastern seaboard city would probably be about 26 per cent. And for a major rubber manufacturer in the north central U. S., about 44 per cent. But electric power for the pharmaceutical manufacturer represents only 0.4 per cent of his total costs, so his saving would be only one-tenth of a cent per dollar of product. And power costs for the rubber plant are only 0.83 per cent of total costs to begin with, so we actually offer a saving of less than four-tenths of a cent per dollar. It adds up to this: *cost* of power, in most cases, is not an important factor in location of industry; an assured *supply* of power is. Therefore, our most essential job is to see that power is ready in ample supply to meet the demands of the future.

Proposed Projects Can Do The Job



Can the job be done? Can that “question mark” period in our power supply picture beyond the year 1960 be filled? The answer is, *yes*, provided all of us in the area—federal agencies, local public agencies and private companies—cooperate with one another to get results for the region. And provided also that political obstructionism is not permitted to interfere with a program of action. After all, this is not a political problem. It is a practical problem that requires huge amounts of investment dollars. The need is clear. The plans are sound. The projects can be readily financed. It is time for all of us in the Northwest to work together for the good of the region.

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